

WHAT IS CLAIMED IS:

1. An electron device comprising:

a main body;

a display disposed at a prescribed position on the main body for showing information visually;

5 a transparent plate member provided on the surface of the display; and

a driving means having magnets and a voice coil, which is installed at a prescribed position on the plate member for vibrating the plate member in response to an audio signal.

2. An electron device comprising:

a main body having a slender shape as a hand set, which is provided with a microphone near the end of the front surface;

5 a display disposed in a prescribed space, which includes the space where a speaker is supposed to be disposed, near the end opposite to the microphone on the main body for showing information visually;

a transparent plate member provided on the surface of the display; and

10 a driving means having magnets and a voice coil, which is installed at a prescribed position on the plate member for vibrating the plate member in response to an audio signal.

3. The electron device as claimed in claim 1, wherein the driving means includes magnets and a voice coil where an audio signal is inputted, either of which is installed on the transparent plate member.

4. The electron device as claimed in claim 2, wherein the

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driving means includes magnets and a voice coil where an audio signal is inputted, either of which is installed on the transparent plate member.

5. The electron device as claimed in claim 1, wherein the driving means are installed at plural places on the transparent plate member.

6. The electron device as claimed in claim 2, wherein the driving means are installed at plural places on the transparent plate member.

7. The electron device as claimed in claim 1, wherein:
the voice coil is a planar coil having a shape of a square frame; and

5 the magnets are disposed at places corresponding to both inside and outside of the frame of the voice coil on an opposite spaced surface to the surface where the voice coil is installed.

8. The electron device as claimed in claim 2, wherein:
the voice coil is a planar coil having a shape of a quadrilateral frame; and

5 the magnets are disposed at places corresponding to both inside and outside of the frame of the voice coil on an opposite spaced surface to the surface where the voice coil is installed.

9. The electron device as claimed in claim 7, wherein a plurality of the planar coils are built up in the direction orthogonal to the surface where the planar coils are installed.

10. The electron device as claimed in claim 8, wherein a plurality of the planar coils are built up in the direction orthogonal to the surface where the planar coils are installed.

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